

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/012047

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02M5/257 H02M1/12 H02P7/295

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M H02P H02K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 859 452 A (KURZ, GERHARD) 19 August 1998 (1998-08-19) cited in the application column 4, line 43 - line 49; figure 3	1,9
A	EP 0 760 551 A (MINOLTA CO., LTD) 5 March 1997 (1997-03-05) column 3, line 44 - column 4, line 4; figure 2 column 5, line 44 - column 6, line 33; figure 5	1,7-9
A	DE 21 31 750 A1 (ALTENBURGER KG) 28 December 1972 (1972-12-28) the whole document	1,7-9
A	DE 100 52 910 A1 (LOHER AG) 25 July 2002 (2002-07-25) paragraphs '0007!, '0011!; figure 1	1,4,6,9

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

1 March 2005

Date of mailing of the international search report

18/03/2005

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0859452	A	19-08-1998	DE 19705907 A1	27-08-1998
			DE 29702524 U1	17-07-1997
			AU 725876 B2	26-10-2000
			AU 5393698 A	20-08-1998
			DE 59800041 D1	09-12-1999
			EP 0859452 A1	19-08-1998
			JP 10271891 A	09-10-1998
			TR 9800216 A2	21-09-1998
			US 5955794 A	21-09-1999
EP 0760551	A	05-03-1997	JP 9068898 A	11-03-1997
			EP 0760551 A2	05-03-1997
			US 5719493 A	17-02-1998
DE 2131750	A1	28-12-1972	NONE	
DE 10052910	A1	25-07-2002	NONE	